

REPORTS OF EXCURSIONS

HELENA GORGE

On October 3, 1954, members of the W.A. Naturalists' Club visited for the first time that part of the Helena valley, due south of Darlington, which is known as the Helena gorge. Access was by means of the valley of the river which was followed from South Guildford through Bushmead. After passing from the south to the north bank of the river at the Darlington turn-off the party travelled along a gravel road until this joined the dirt track leading to Mundaring Weir. When the buses could proceed no further, about 2½ miles within the scarp, they were left and members continued on foot to explore the valley.

The narrow steep-sided and physiographically young valley, where most of the collecting was done, lies in granite gneiss. Settlement has only advanced along the valley floor to the eastern limit of the alluvial loams. East from where these loams pinch out the valley is in a relatively untouched state, except for the pipeline from Mundaring and the track from which the pipe is serviced.

Notes on the flora were made by Miss S. Elliott who recorded the following: Along the slopes the most plentiful forms were *Staekhouisia Hugclii*, *S. Brunonis*, *Conostylis setigera*, *C. eandicans*, *Dryandra nivea*, *Phyllanthus ealeinus*, *Sowcrbaea laxiflora*, *Burchardia multiflora*, *Hibbertia hypericoides*, *H. montana*, *Dampiera euneata* and *Pimelea roseus*. Less common were *Sphaerolobium medium*, *Chorizema Dieksonia*, *Grevillea pulilifera*, *G. Endlieheriana*, *Tetradlea viminea*, *Orthrosanthus latus*, *Londonia aurea*, *Calothamnus quadrifidus*, *Kennedyia prostrata*, *Haemodorum paniculatum* and *Drosera Menziesii*. *Gastrolobium spinosum*, *Kennedyia coccinea* and *Anigozanthus bicolor* were noted but not plentiful. Along the roadside to the gorge *Leschenaultia biloba* was common. In the more open sections *Stylidium neglectum* was blooming profusely as was *Stypandra imbricata*. Along the creek were flowering *Agonis linearifolium*, *Acacia* sp., *Kunzea* sp. and *Albizia distachya*. Adjacent to the river were noted *Trymalium ledifolium*, *Thomasia macrocarpa* and *Darwinia citriodora*, *Borya nitida* was common on rocky slopes. The introduced Cape Tulip (*Homeria collina*) was flowering along the creek edge.

The aquatic fauna of the river, whilst not rich, did show indications of a relatively little disturbed environment. Beneath rocks in the swift-flowing parts of the stream a sponge was common and although no gemmules were present it was quite clearly a species of *Spongilla*. An apparently similar sponge occurs in identical situations in the Broekman River further north. Large numbers of nymphs of *Austroesehna anacantha* (Odonata) and larvae of Trichoptera (Fam. Philopotamidae) were also present beneath stones. Nymphs of Stone-flies and Mayflies were scarce. The Jilgie (*Chaeraps quinquecarinatus*) was common but found to be most frequent in the stiller waters where the Mussel, *Westralunio ambiguus*, abounded. Attached to the upper surfaces

of rocks in the rapidly flowing parts of the stream were large numbers of the larvae and pupae of *Simulium tonnoiri* (Diptera).

In the calmer parts of the stream and the adjacent pools were tadpoles of a species of *Helioporus* and of a *Crinia*. The following adult frogs were identified: *Crinia glauerti*, *C. georgiana*, *C. leai*, *Hyla adalaidensis* and specimens of the Wheatbelt race of the species named *Crinia signifera* in *Key to the Frogs of South-western Australia*. The fishes collected were a goby (*Lizagobius olorum*) and an Atherine (*Atherinosoma edelensis*) — both identified by Mr. G. P. Whitley — and the Pygmy Perch (*Edelia vittata*). The Freshwater Cobbler (*Tandanus bostocki*) and a *Galaxias* sp. were seen.

Of the terrestrial invertebrates those which attracted the most attention were the abundant trapdoor spiders *Synothele michaelseni* (Barychelidae) and *Arbanites festivus* (Ctenizidae); both of these build burrows in the moist clay banks of the stream. The native snail *Bothriembryon serpentinus* was found in a number of localities.

As it was a hot day birds were not much in evidence. Dr. D. L. Serventy reported the Kookaburra, Sacred Kingfisher, Golden Bronze Cuckoo (calling), Grey Fantail, Rufous Whistler, Western Warbler, Brown Thornbill, Banded Blue Wren, Red-tipped Diamond-bird, Silveryeye, Brown Honeyeater, Red Wattle-bird, Raven, Grey Butcher-bird and Magpie.

The area deserves to be collected more thoroughly for it appears to be near to the northern limit of *Crinia leai*, *Arbanites festivus* and *Bothriembryon serpentinus*, and is the southern limit of *Synthele michaelseni*. In addition the valley acts as a corridor through which at least the Wheatbelt race of *Crinia signifera* has penetrated.

A fuller study of the fauna may indicate a great mixing of northern, southern and eastern faunas in this part of the valley.

—A. R. MAIN

FROM FIELD AND STUDY

Early Nesting of Black-faced Wood-Swallow (*Artamus melanops*).—The Black-faced Wood-Swallow has been referred to as a November-January breeder in the south-west of this State (Serventy and Whittell, *Birds of Western Australia*). It has come under our notice that this is not always the case. In October, 1953, we observed a group of Black-faced Wood-Swallows which became agitated and annoyed at our presence in their vicinity which is unlike them in their off-nesting period. This was found to be due to the group of wood-swallows protecting three young. It seemed that this species had a communal habit in the raising of their young, as there were only three fledglings and 12 adult birds. We concluded that nesting activities must have commenced during September.

—J. R. and W. C. FORD, Fremantle.